

ABSTRACT OF THE DISCLOSURE

For the purpose of obtaining disease-free seeds of high quality by efficiently controlling a seed borne disease of seeds of vegetable crops, ornamental plants and other herbage, seeds are subjected to a physical or chemical sterilization to reduce a fungal or bacterial amount held by the seeds and then the thus sterilized seeds are treated by an effective microorganism which is antagonistic against a pathogen of the seed borne disease. Controlling effect and fixing property of the effective microorganism can be enhanced by using a plurality of fungal or bacterial strains thereof. Examples of such effective microorganisms include fungi or bacteria belonging to the genus Pantoea or the genus Leclercia which is antagonistic against the pathogen belonging to the genus Xanthomonas.